Applicant : Ulf Mattsson et al.
Serial No. : 09/721,942
Filed : November 27, 2000
Page : 5 of 7

Attorney's Docket No.: 17299-006001

REMARKS

Objections to the specification

The abstract has been amended as required by the Examiner.

Section 112 objections

Claims 1, 5, and 7 have been amended to address the Examiner's objections.

Section 103 rejections

The Examiner rejected claims 1 and 7 as being rendered obvious by *Lyson et al.* (U.S. Patent No. 6,327,595) in view of *Delo et al.* (U.S. Patent No. 6,389,484) and *Febvre* (U.S. Patent No. 5,333,197). It is respectfully submitted, however, that the subject matter of the claimed invention would not have been obvious to a person having ordinary skill in the art in view of these references.

The claimed invention comprises encrypting each character of a data element into an encrypted character selected from a restricting character set. The Examiner stated that this element is disclosed by *Febvre.*

Febvre discloses a transmission system in which a null character is sent when no data is available (col. 1, lines 14-16). In *Febvre,* the null character acts as a filler character to keep the line open. A problem arises when the user data include the null character: If the null character is transmitted, the receiver will simply discard the character. (col. 1, lines 16-20).

The solution proposed by *Febvre* involves "scrambling" the bits that make up a character of user data using a bit-wise exclusive-or process according to a look-up table (col. 4, lines 28-31, 41-53). A possible result of the scrambling process is the null character, which is *a reserved character.*[1] Nevertheless, if the result of the scrambling happens to be a null character, *the null character is still sent.* The data character that resulted in a null character is then re-scrambled with the next character in the lookup table (col. 4, lines 31-36). A recipient who receives a character advances a pointer in a look-up table *whether or not the received character is a null*

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[1] *Febvre,* col. 1, lines 25-28, explains that the method disclosed by *Febvre* "is a particular example of the more general problem of transmitting data . . . when that data includes so called reserved characters." In the embodiment described in *Febvre,* the reserved character is the null character. *See* col. 1, lines 16-20.

Applicant : Ulf Mattsson et al.
Serial No. : 09/721,942
Filed : November 27, 2000
Page : 6 of 7

Attorney's Docket No.: 17299-006001

(fig. 5, ref. S105). If the received character is a null, however, the character is discarded; if it is not a null, it is unscrambled (fig. 5, refs. S103 and S104).

The Examiner appears to consider the claimed encryption step to correspond to *Febvre's* scrambling step. It is not clear, however, what precisely in *Febvre* would correspond to the claimed "restricting character set." There appear to be two possibilities:

- Set A: The set of all characters including the null character; and

- Set B: The set of all characters excluding the null character.

Set A however, is the set of all possible characters. Hence, there is nothing restricting about this character set. Set B thus appears to be the only plausible choice for the "restricting character set" recited in the claim.

The Examiner appears to consider that the scrambled character disclosed by *Febvre* corresponds to the claimed encrypted character. If set B is the "restricted character set," then the claim limitation of the third paragraph, namely that the encrypted character be "selected from said restricting character set" is plainly not met. This is because, as noted above, there are times when *Febvre's* scrambling step yields the null character, which by definition is outside the proposed "restricting character set" (i.e. set B above).

None of the references cited by the Examiner discloses the step of encrypting each character of a first data element into an encrypted character selected from a restricting character set, as required by claims 1 and 7. The remaining claims are dependent on either claim 1 or claim 7, and are patentable for at least the same reasons. It is respectfully requested, therefore, that the Examiner's rejection be withdrawn.

Applicant : Ulf Mattsson et al.
Serial No. : 09/721,942
Filed : November 27, 2000
Page : 7 of 7

Attorney's Docket No.: 17299-006001

Enclosed is a \$430 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 12/2/04

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